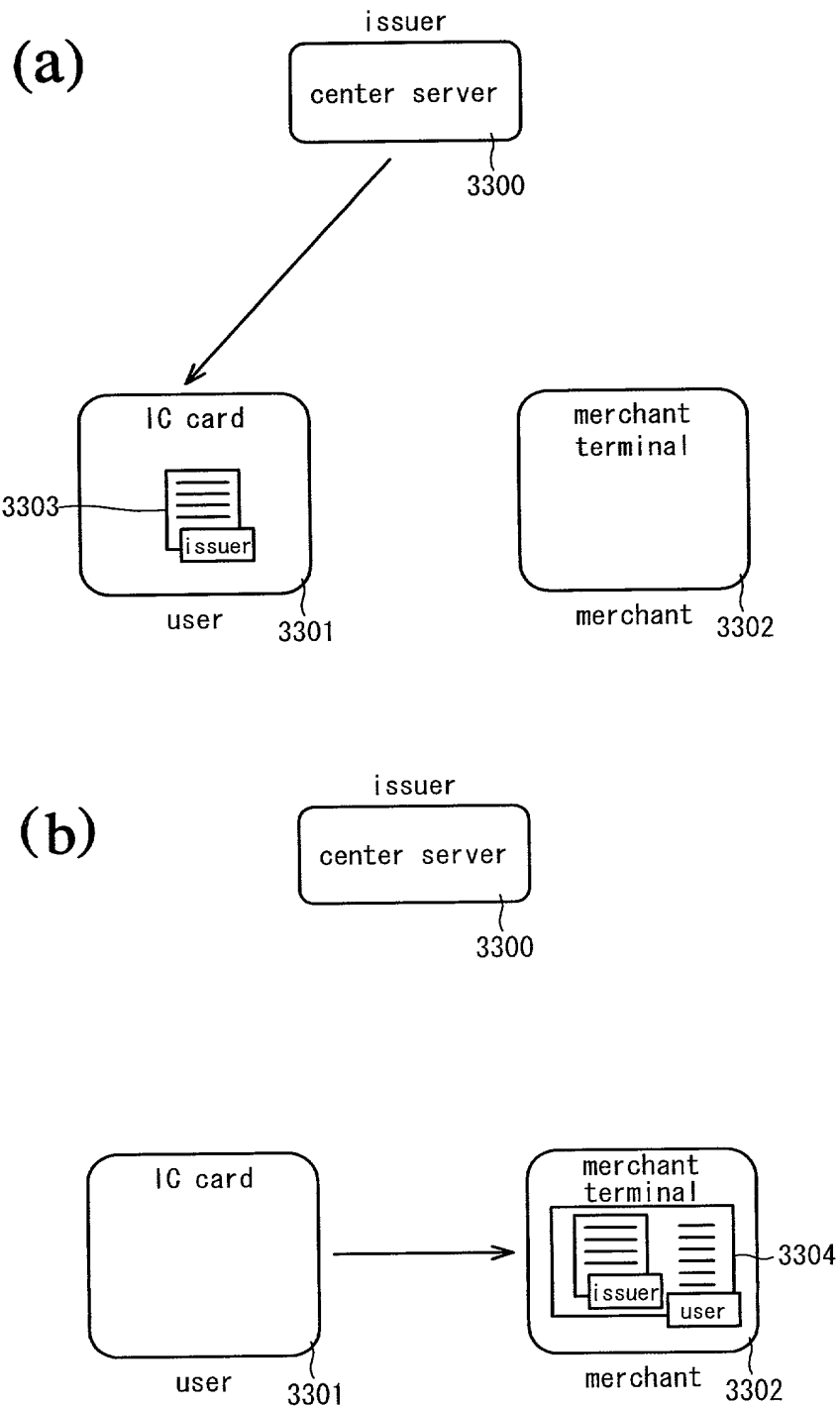
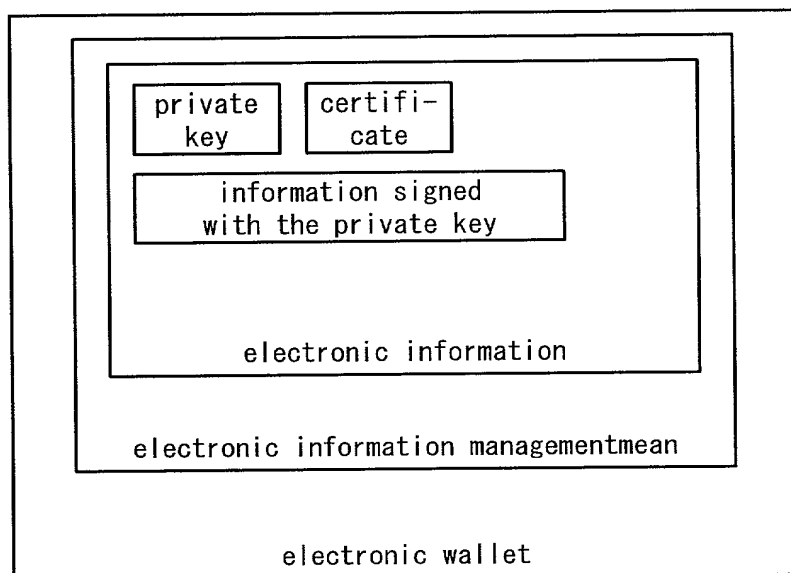
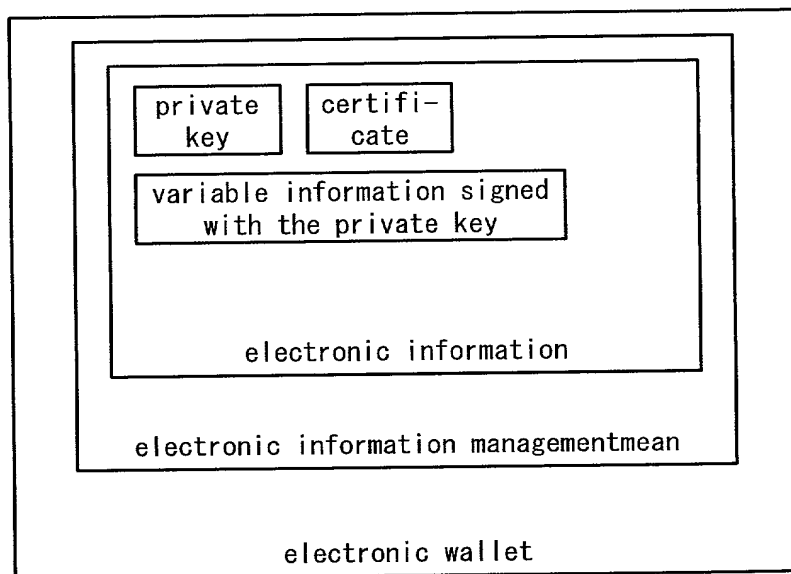


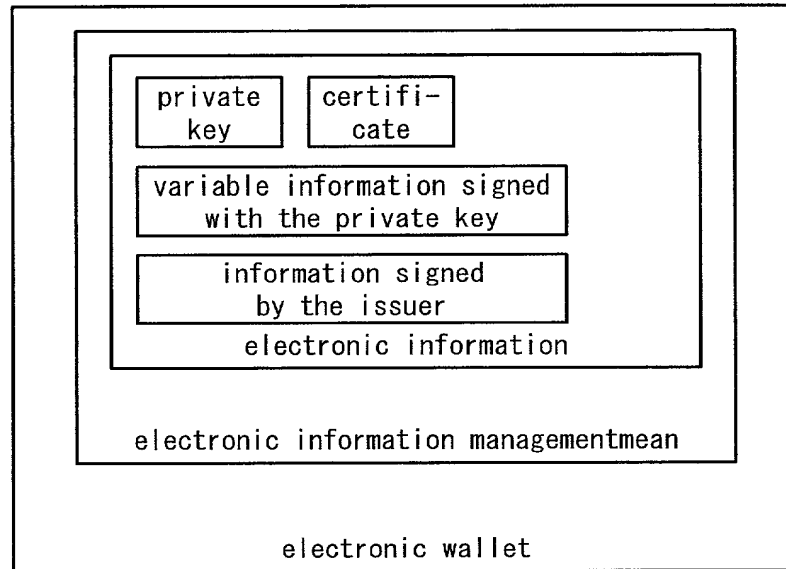
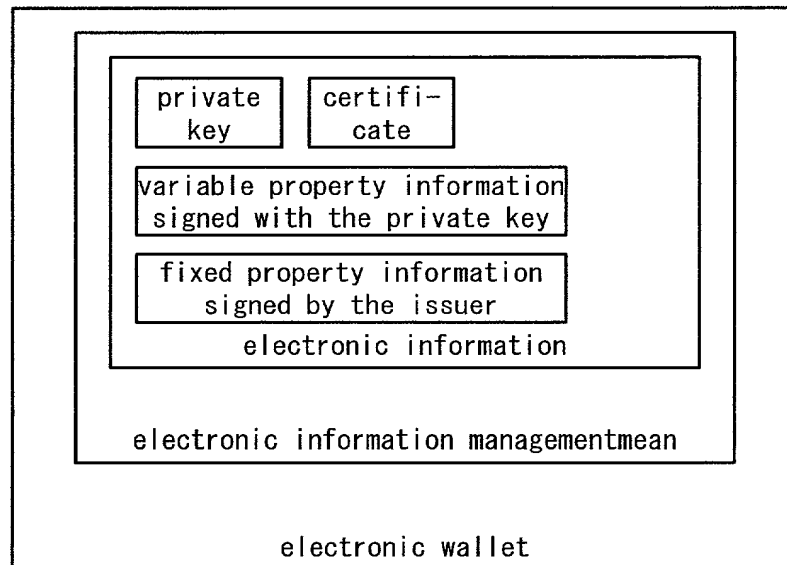
*Fig. 1 Prior Art*

*Fig. 2*

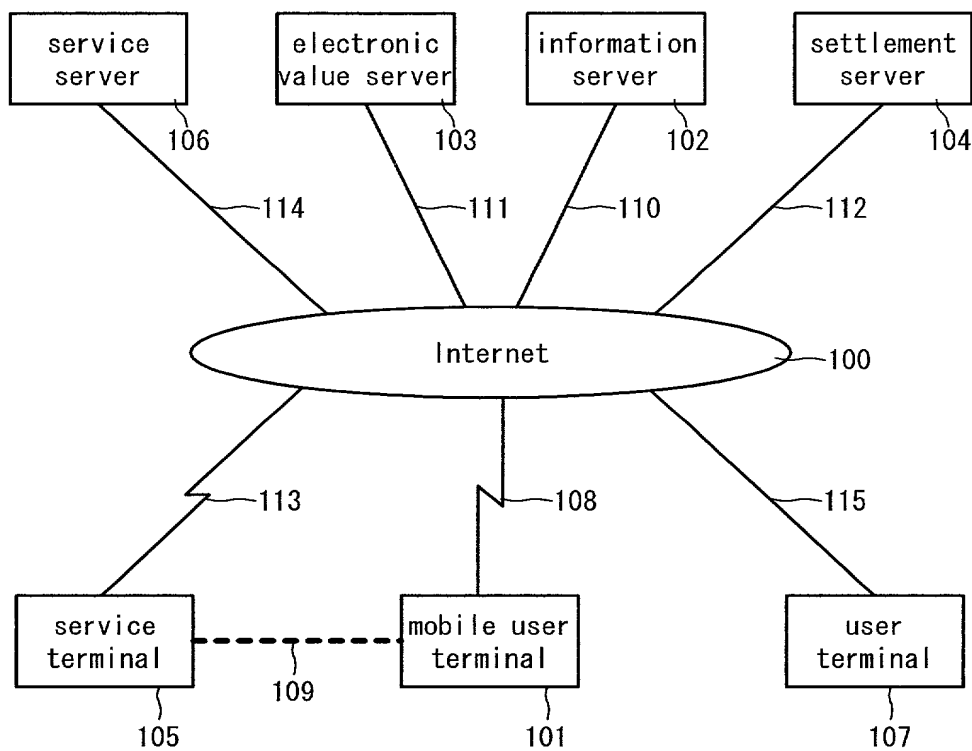


*Fig. 3*



*Fig. 4**Fig. 5*

**Fig. 6**



(b)

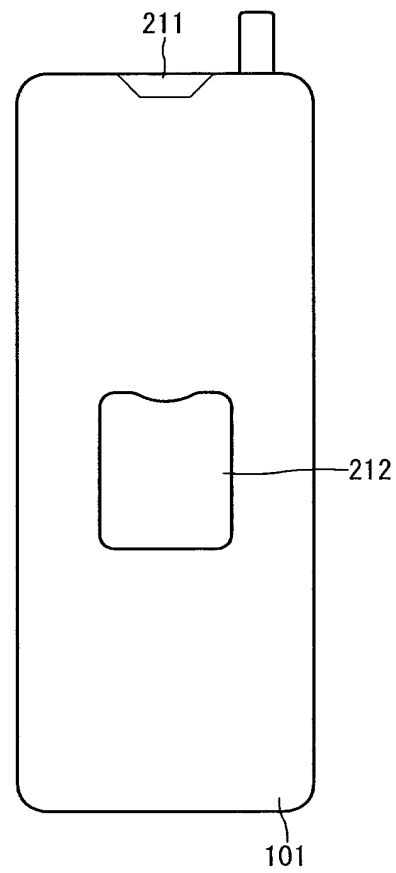


Fig. 8

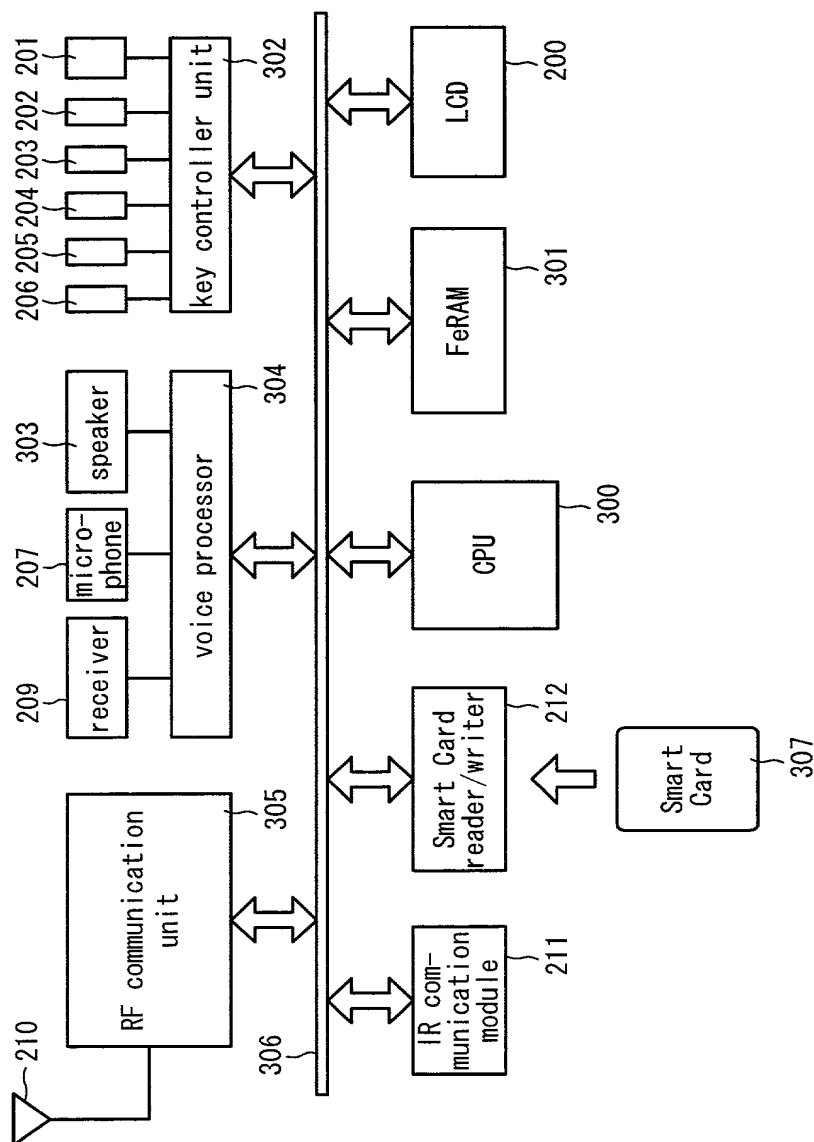


FIG. 9

Fig. 9

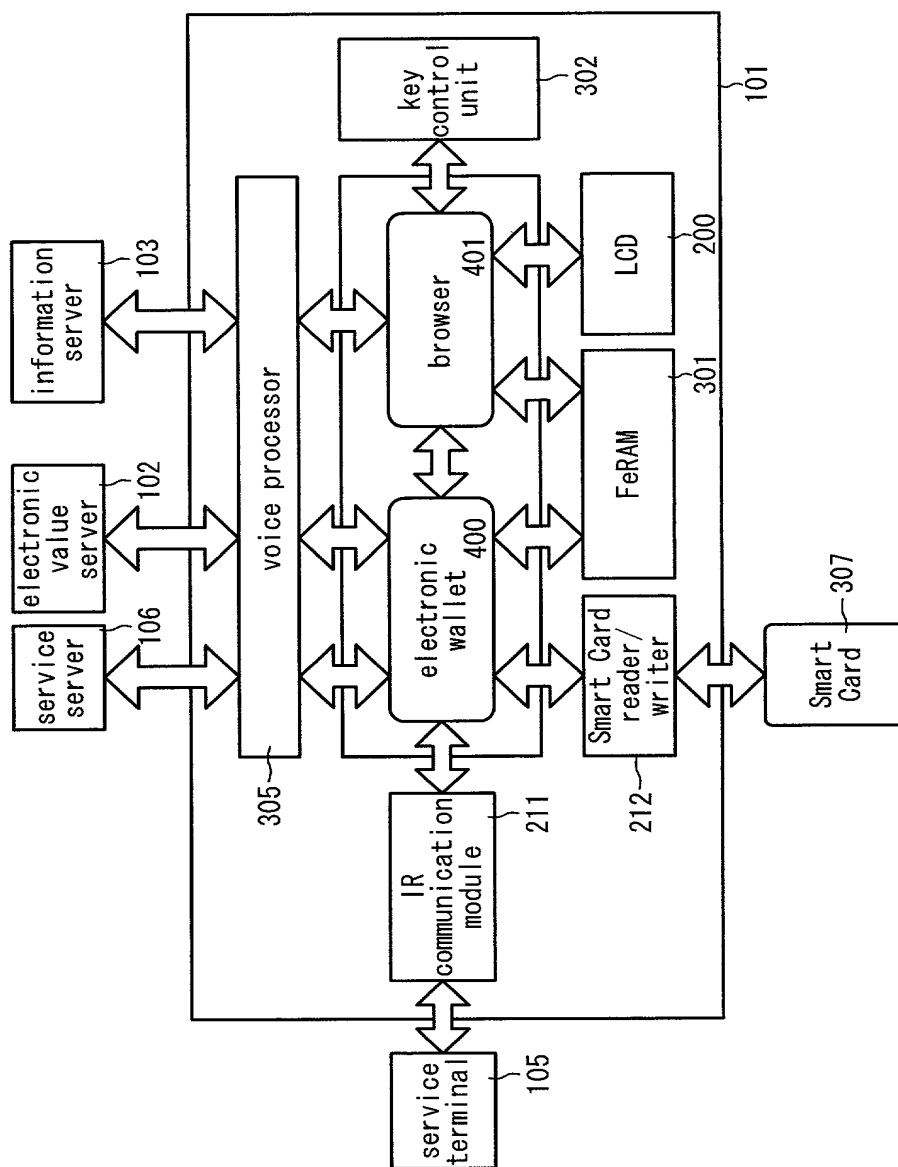


Fig. 10

(a)

My Menu	502
1 Internet	
2 E-Wallet	
3 E-Mail	
4 Phone	502
5 Address Book	
6 Bookmark	
7 Setup	
back (P) ok	501

200

(b)

Internet
1 News
2 Play Guide
3 Search
4 Enter URL
back (P) ok

(c)

Internet	Secure
Ticket Order Form	
Ticket:Soccer 200X	
Japan vs Brazil	
Date:Jun 30 2002 14:00	
Stwdium:Yokohama	
Seat Grade:SS	
Price:200.00USD	
Number: <input type="text"/>	
back (P) ok	

(a)

E-Wallet
Enter Password
<input type="text"/>
back (P) ok

(b)

E-Wallet	Secure
E-Value	Receipt
1 Prepayed Card-A	
2 Prepayed Card-B	
3 Airline Ticket	
4 Movie Ticket	
5 Concert Ticket	
6 Soccer 200X Japa	
7 Soccer 200X Japa	
back (P) ok	

(c)

E-Wallet	Secure
Soccer 200X	
Japan vs Brazil	
	
Data:2002/06/30 14:00	
Stadium:Yokohama	
Seat: ss-A-28	
back (P) ok	

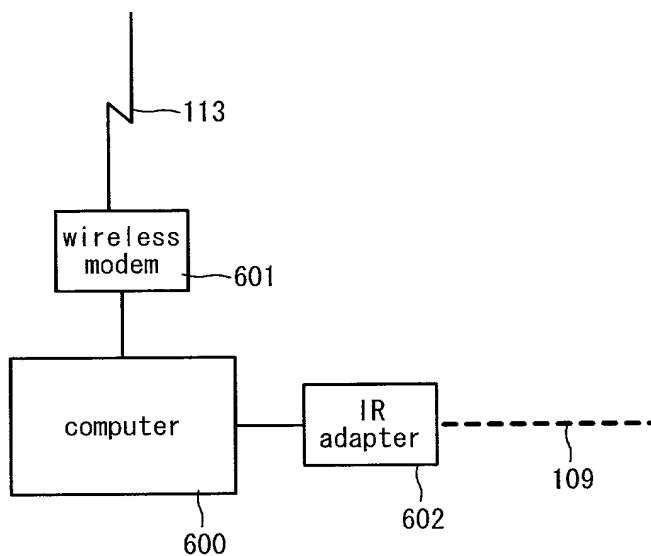
(a)

Internet	Secure
Your oder was accepted.	
Receive e-Value	
back (P) ok	

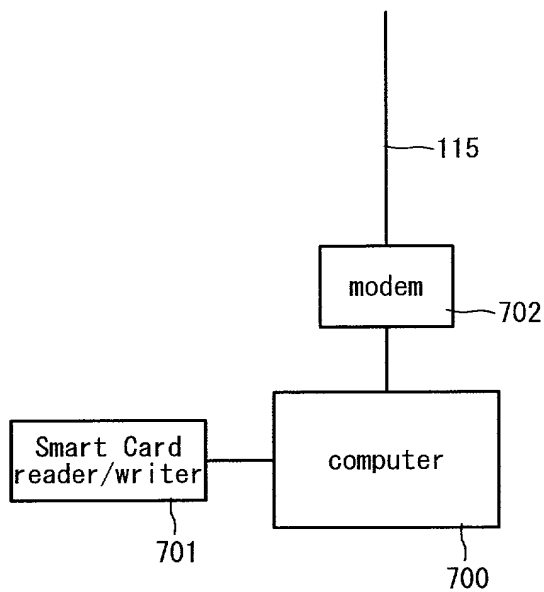
09/831830

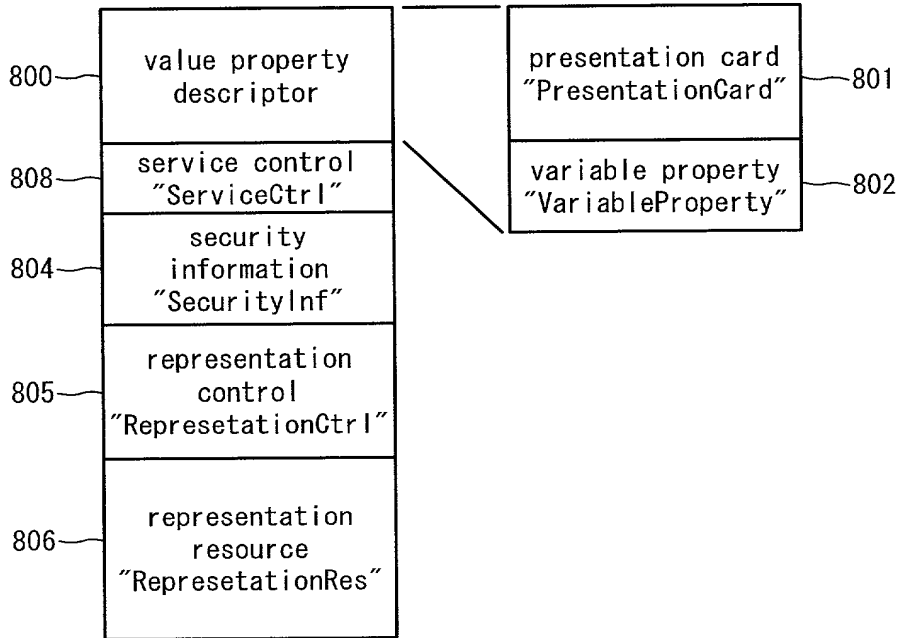
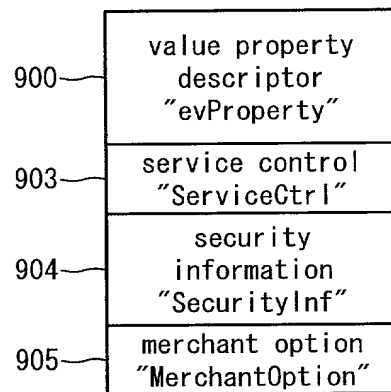


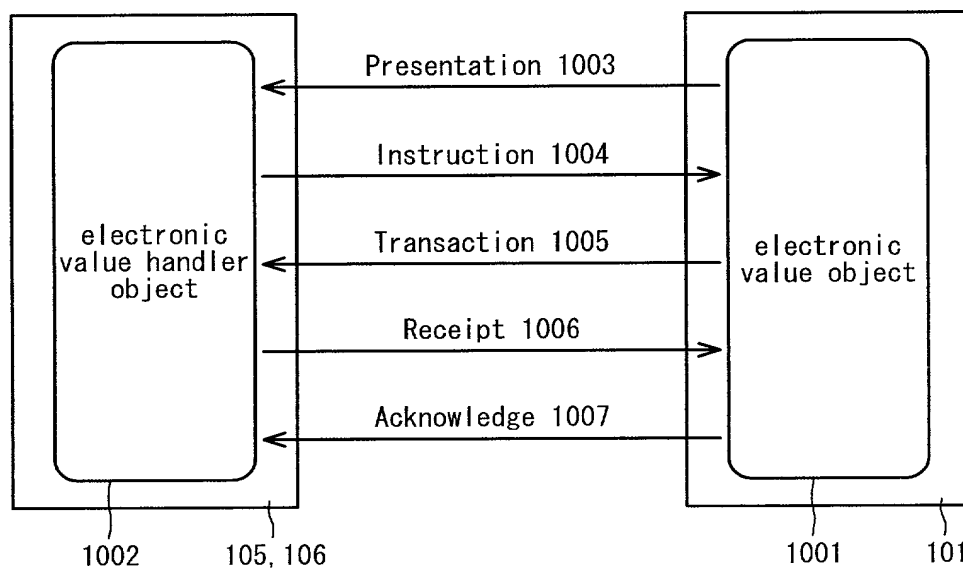
*Fig. 11*



*Fig. 12*



*Fig. 13**Fig. 14*

[illegible]

(a) **Presentation 1003**

header	Code number	<table border="1"> <tr> <td>header</td> <td>request number</td> <td>presentation card</td> <td>service control message</td> <td>electronic value signature</td> <td>electronic value certificate</td> </tr> </table>						header	request number	presentation card	service control message	electronic value signature	electronic value certificate
header	request number	presentation card	service control message	electronic value signature	electronic value certificate								
1117	1118	1110	1111	1112	1113	1114	1115	1116					

(b) **Instruction 1004**

header	<table border="1"> <tr> <td>header</td> <td>request number</td> <td>settlement number</td> <td>service control message</td> <td>merchant signature</td> <td>merchant certificate</td> <td>session key A</td> </tr> </table>						header	request number	settlement number	service control message	merchant signature	merchant certificate	session key A
header	request number	settlement number	service control message	merchant signature	merchant certificate	session key A							
1128	1120	1121	1122	1123	1124	1125	1126	1127					

(c) **Transaction 1005**

header	<table border="1"> <tr> <td>header</td> <td>request number</td> <td>settlement number</td> <td>merchant ID</td> <td>service control message</td> <td>electronic value signature</td> <td>session key B</td> </tr> </table>						header	request number	settlement number	merchant ID	service control message	electronic value signature	session key B
header	request number	settlement number	merchant ID	service control message	electronic value signature	session key B							
1138	1130	1131	1132	1133	1134	1135	1136	1137					

(d) **Receipt 1006**

header	<table border="1"> <tr> <td>header</td> <td>request number</td> <td>settlement number</td> <td>electronic value ID</td> <td>service control message</td> <td>receipt information</td> <td>merchant signature</td> </tr> </table>						header	request number	settlement number	electronic value ID	service control message	receipt information	merchant signature
header	request number	settlement number	electronic value ID	service control message	receipt information	merchant signature							
1148	1140	1141	1142	1143	1144	1145	1146	1147					

(e) **Acknowledge 1007**

header	electronic value signature
1150	1151

**SECRET**

~1200  
description  
about service  
provider

# BOOK REVIEW

```
<SignedDescription about="VariableProperty" evID="10000000000000000000000000000001">  
  <evFlag VALIDITY=1 USED=0/>  
  <evProp name="USE_SERIAL" value=0/>  
  <evProp name="NUMBER" value=1/>  
  <evProp name="START_VALID" value="1999.07.23T00:00+0900"/>  
  <evProp name="END_VALID" value="2002.06.30T23:59+0900"/>  
  <evProp name="MESSAGE_2" value=/>  
  <SignedTime>1999.09.07T12:15:07+0900</SignedTime>  
  <Signer rdf:resource="http://www.evalue.com/evalue/10000000000000000000000000000001"/>  
  <Signature>123456789A</Signature>  
</SignedDescription>
```

*Fig. 19*

```
<Description about="ServiceCtrl" evID="10000000000000000000000000000001">
  <SC-module type="ticket" ID=1 number=$NUMBER start=$START_VALID end=$END_VALID
    used_flag=$USED validity_flag=$VALIDITY serial=$USE_SERIAL/>
  <SC-module type="verify_prop" ID=2 prop=$SEAT_NUM/>
  <SC-module type="set_message" ID=3 msg=$MESSAGE_2/>
</Description>

<Description about="SecurityInf" evID="10000000000000000000000000000001">
  <evOwner>
    <Description about="http://www.evalue.com/user/11000000000000000000000000000001"
      EntityName="Taro Suzuki"
      EntityID="11000000000000000000000000000001"/>
  </evOwner>
  <evResource>http://www.evalue.com/evalue/10000000000000000000000000000001</evResource>
  <evCertificate>
    0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF0123456789ABCDEF
  </evCertificate>
  <evPrivateKey>0123456789</evPrivateKey>
  <evAuthKey>0123456789ABCDEF</evAuthKey>
  <evhandlerAuthKey>ABCDEF0123456789</evhandlerAuthKey>
</Description>
```

*Fig. 20*

```

<SignedDescription about="http://www.evalue.com/evaluate/ev_0000300000000201/RpCtrl"
  evID="10000000000000000000000000000001">
  <OptimumRpCtrl>
    <Description about="http://www.evalue.com/evaluate/ev_0000300000000201/RpCtrl_M01">
      <RpType>MOBILE 01</RpType>
      <RepresentaionCtrlData>
        <CARD name="Main">
          <HAEAD>
            <TITLE><evP>$TITLE</evP></TITLE>
          </HAEAD>
          <BODY>
            <Do type="ACCEPT">
              <Go HREF="wallet:///evTransact"/>
            </Do>
            <CENTER><H1><evP>$TITLE</evP></H1></CENTER>
            <BR><CENTER><IMG SRC="wallet:///evResource label=MAIN_IMG"></CENTER>
            <BR><UL>Date:<evP>$DATE</evP>
            <BR>Stadium:<A HREF=<evP>$LOCATION_URI</evP>><evP>$LOCATION_NAME</evP></A>
            <BR>Seat:<A HREF=<evP>$SEAT_POS</evP>><evP>$SEAT_NUM</evP></A>
            <BR><A HREF="Detail">Details</A></UL>
          </BODY>
        </CARD>
        <CARD name="Detail">
          <HAEAD>
            <TITLE><evP>$TITLE</evP></TITLE>
          </HAEAD>
          <BODY>
            <Do type="ACCEPT">
              <Go HREF="wallet:///evTransact"/>
            </Do>
            <CENTER><H1><evP>$TITLE</evP></H1></CENTER>
            <BR><UL>Date:<evP>$DATE</evP>
            <BR>Open Gate:<evP>$GATE_OPEN</evP>
            <BR>Stadium:<A HREF=<evP>$LOCATION_URI</evP>><evP>$LOCATION_NAME</evP></A>
            <BR><A HREF="wallet:///evResource label=MAP">Map</A>
            <BR>Seat:<A HREF=<evP>$SEAT_POS</evP>><evP>$SEAT_NUM</evP></A>
            <BR>Term of Validity: <evV>$START_VALID</evV> - <evV>$END_VALID</evV>
            <BR>Sponsor:<A HREF=<evP>$SPONSOR_URI</evP>><evP>$SPONSOR_NAME</evP></A>
            <BR>Contact:<A HREF="telephone:///dial num=<evP>$CONTACT_TELNUM</evP>">
              <evP>$CONTACT_TELNUM</evP></A>
            <BR>Issuer:<A HREF=<evP>$ISSUER_URI</evP>><evP>$ISSUER_NAME</evP></A>
            <BR><evP>$MESSAGE_1</evP>
            <BR><evV>$MESSAGE_2</evV>
            <BR><A HREF="Main">Top Page</A></UL>
          </BODY>
        </CARD>
      </RepresentaionCtrlData>
    </Description>
  </OptimumRpCtrl>
  <SignedTime>1999.09.07T12:15:07+0900</SignedTime>
  <Signer rdf:resource="http://www.evalue.com"/>
  <Signature>3456789ABC</Signature>
</SignedDescription>

```

0931830 "0931830"



```
< Description about="http://www.evaluate.com/evaluate/ev_0000300000000201/RpRes"
    evID="10000000000000000000000000000001">
  <OptimumRpRes>
    <Image>
      URI="http://www.evaluate.com/resources/0123456789ABCDEF"
      label="MAIN_IMG"
      type="jpeg"
      data="1202A846574A63D946 ..... B48364605987F687543"
    </Image>
    <Image>
      URI="http://www.evaluate.com/resources/123456789ABCDEF0"
      label="MAP"
      type="jpeg"
      data="202A846574A63D946B ..... 48364605987F687543F"
    </Image>
    <Sound>
      URI="http://www.evaluate.com/resources/23456789ABCDEF01"
      label="Greet"
      type="mp3"
      data="1202A846574A63D946 ..... B48364605987F687543"
    </Sound>
  </OptimumRpRes>
</Description>
```

*Fig. 22*

```

<EVML version="0.1">
  <CARD name="Main">
    <HAEAD>
      <TITLE>Soccer 200X Japan vs Brazil </TITLE>
    </HAEAD>
    <BODY>
      <Do type="ACCEPT">
        <Go HREF="wallet:///evTransact"/>
      </Do>
      <CENTER><H1>Soccer 200X Japan vs Brazil </H1></CENTER>
      <BR><CENTER><IMG SRC='wallet:///evResource label=MAIN_IMG'></CENTER>
      <BR><UL>Date: 2002.06.30T14:00+0900
      <BR>Stadium:<A HREF="http://www.yis.co.jp/map"> Yokohama </A>
      <BR>Seat:<A HREF="http://www.mts.com/ticket123/seat/SS-A-28"> SS-A-28</A>
      <BR><A HREF="Detail">Details</A></UL>
    </BODY>
  </CARD>
</EVML>

```

002 YAM 2 : 11-17 2001 01-01

Fig. 23

```

<EVML version="0.1">
  <Description about="evMerchant://evHandler/evh00000001">
    <SignedDescription>
      <Description about="evProperty" evhandlerID="20000000000000000000000000000001">
        <evType>ticket</evType>
        <evCode>0000300000000201</evCode>
        <evhandlerID>20000000000000000000000000000001</evhandlerID>
        <evName>Soccer 200X Ticket</evName>
        <evConditionBitmap>0000000000000001</evConditionBitmap>
        <evProp name="TITLE" value="Soccer 200X Japan vs Brazil"/>
        <evProp name="DATE" value="2002.06.30T14:00+0900"/>
        <evProp name="GATE_OPEN" value="2002.06.30T10:00+0900"/>
        <evProp name="LOCATION_NAME" value="Yokohama"/>
        <evProp name="LOCATION_URI" value="http://www.yis.co.jp/map"/>
        <evProp name="SEAT_NUM" value="permission="public"/>
        :
        <evProp name="MESSAGE_2" value="permission="public"/>
      </Description>
      <Description about="ServiceCtrl" evhandlerID="20000000000000000000000000000001">
        <SC-module type="ticket" ID=1 number=$NUMBER start=$START_VALID end=$END_VALID
          used_flag=$USED validity_flag=$VALIDITY serial=$USE_SERIAL />
        <SC-module type="Verify_prop" ID=2 prop=$SEAT_NUM/>
        <SC-module type="set_message" ID=3 msg=$MESSAGE_2/>
      </Description>
      <Description about="SecurityInf" evhandlerID="20000000000000000000000000000001">
        <evhandlerOwner>
          <Description about="http://www.evalue.com/merchant/21000000000000000000000000000001">
            EntityName="ABC Event Service"
            EntityID="21000000000000000000000000000001"/>
          </evhandlerOwner>
          <evResource>http://www.evalue.com/evhandler/20000000000000000000000000000001
          </evResource>
          <evAuthKey>0123456789ABCDEF</evAuthKey>
          <evhandlerAuthKey>ABCDEF0123456789</evhandlerAuthKey>
        </Description>
      <SignedTime>1999.09.07T12:15:07+0900</SignedTime>
      <Signer>
        <Description about="http://www.evalue.com">
          <EntityName>Mobile Ticket Service</EntityName>
          <EntityID>00000000000000000000000000000001</EntityID>
          <Email>ev_issuer@evalue.com</Email>
          <Telnum>81-3-5460-xxxx</Telnum>
        </Description>
      </Signer>
      <Signature>23456789AB</Signature>
    </SignedDescription>
    <Description about="MerchantOption" evhandlerID="20000000000000000000000000000001">
      <SetevProp>$SEAT_NUM="SS-1"</SetevProp>
      <SetevProp>$MESSAGE_2="Special News available: http://www.yis.co.jp/news/20020630"</SetevProp>
    </Description>
  </Description>
</EVML>

```

900  
value property  
descriptor

903  
service  
control

904  
security  
information

905  
merchant  
option

*Fig. 24*

(a)

```
<SC-MSG>
  <scm_msg ID=1 number=1 start="1999.07.23T00:00+0900" end="2002.06.30T23:59+0900"
    used_flag=0 validity_flag=1 serial=0/>
  <scm_msg ID=2 prop="SS-A-28"/>
  <scm_msg ID=3 msg=/>
</SC-MSG>
```

(b)

```
<SC-MSG>
  <scm_msg ID=1 number=0 start="2002.06.30T12:25+0900" end="2002.06.30T23:59+0900"
    used_flag=1 validity_flag=1 serial=1/>
  <scm_msg ID=3 msg="Special News available: http://www.yis.co.jp/news/20020630/"/>
</SC-MSG>
```

(c)

```
<SC-MSG>
  <scm_msg ID=1 number=0 start="2002.06.30T12:25+0900" end="2002.06.30T23:59+0900"
    used_flag=1 validity_flag=1 serial=1/>
  <scm_msg ID=2 prop="SS-A-28"/>
  <scm_msg ID=3 msg="Special News available: http://www.yis.co.jp/news/20020630/"/>
</SC-MSG>
```

(d)

```
<SC-MSG>
  <scm_msg ID=1 serial=1/>
</SC-MSG>
```

*Fig. 25*

```
<SignedDescription about="VriableProperty" evID="10000000000000000000000000000001">
  <evFlag VALIDITY=1 USED=1/>
  <evProp name="USE_SERIAL" value=1/>
  <evProp name="NUMBER" value=0/>
  <evProp name="START_VALID" value="2002.06.30T12:25+0900"/>
  <evProp name="END_VALID" value="2002.06.30T23:59+0900"/>
  <evProp name="MESSAGE_2" value="Special News available: http://www.yis.co.jp/news/20020630"/>
  <SignedTime>2002.06.30T12:25+0900</SignedTime>
  <Signer rdf:resource="http://www.evalue.com/evalue/10000000000000000000000000000001"/>
  <Signature>A12345678A</Signature>
</SignedDescription>
```

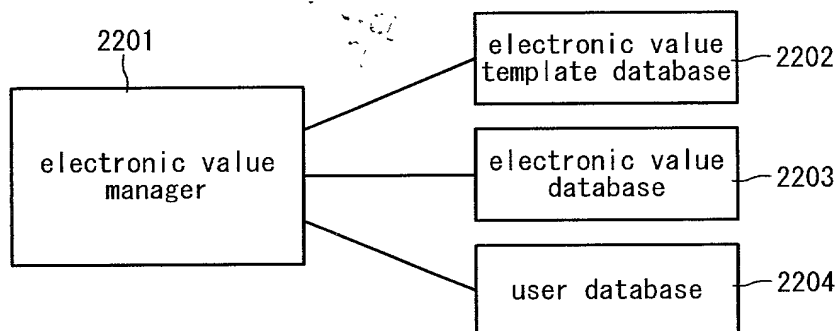
"0931830" 0931830

*Fig. 26*

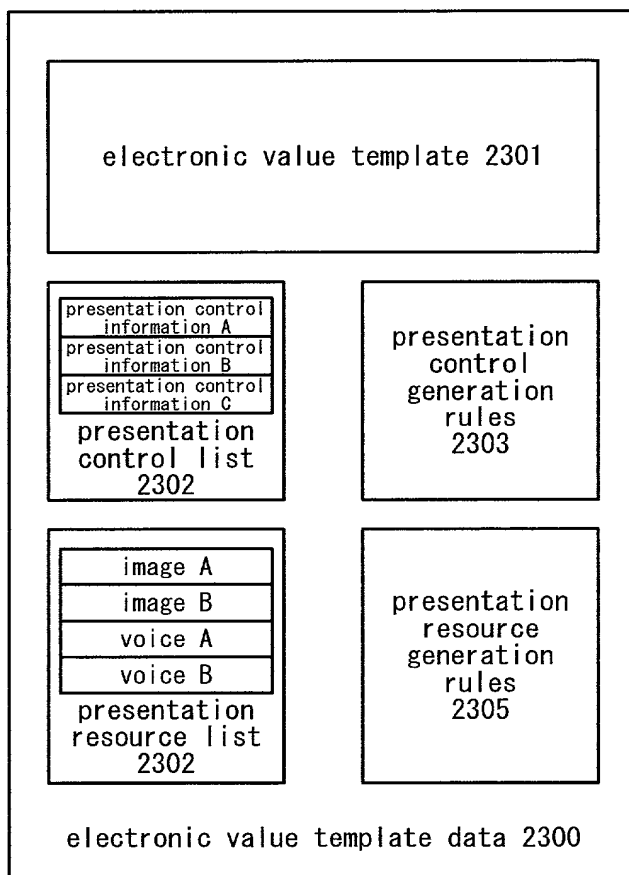
```
<EVML version="0.1">
  <CARD name="Receive EV">
    <HAEAD>
      <TITLE>Receive Electronic Value</TITLE>
    </HAEAD>
    <BODY>
      Your order was accepted.
      <BR>
      <CENTER>
        <H1>
          <Go HREF='wallet:///evReceive'>
            <param name="EV_ISSUER_URI" value="http://www.evalue.com"/>
            <param name="SESSION_NUM" value="a01b23c45d67e89f"/>
            Receive e-Value
          </Go>
        </H1>
      </CENTER>
    </BODY>
  </CARD>
</EVML>
```

09831830 083101

*Fig. 27*



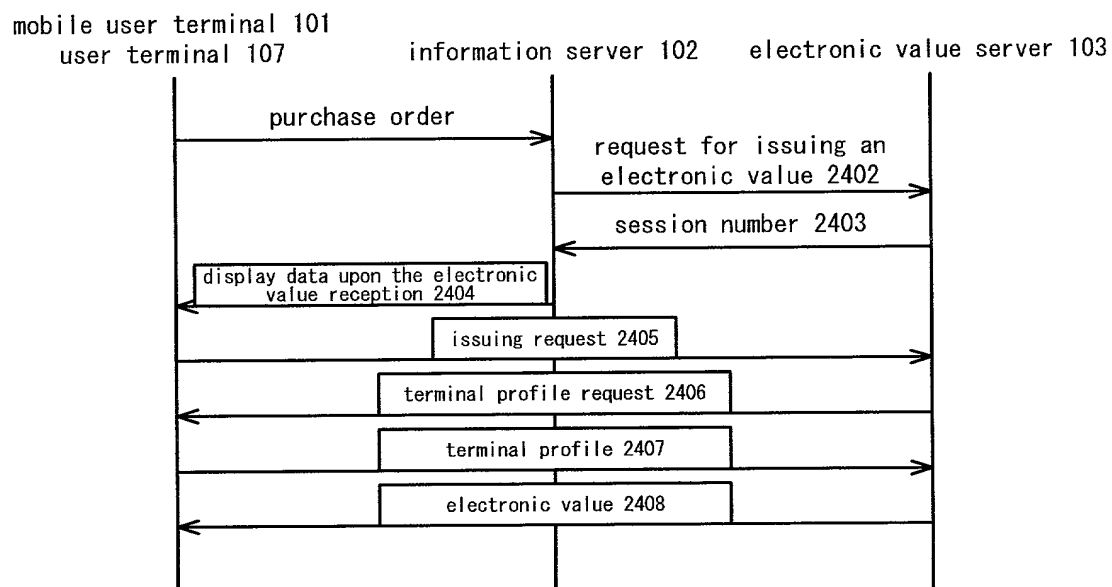
*Fig. 28*



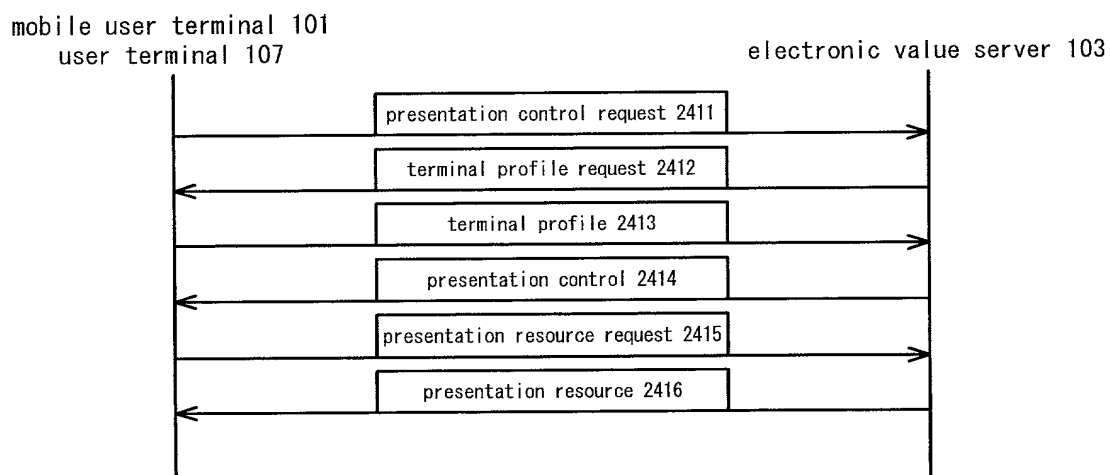
0981830-0331

*Fig. 29*

(a)



(b)



09/831830 083101



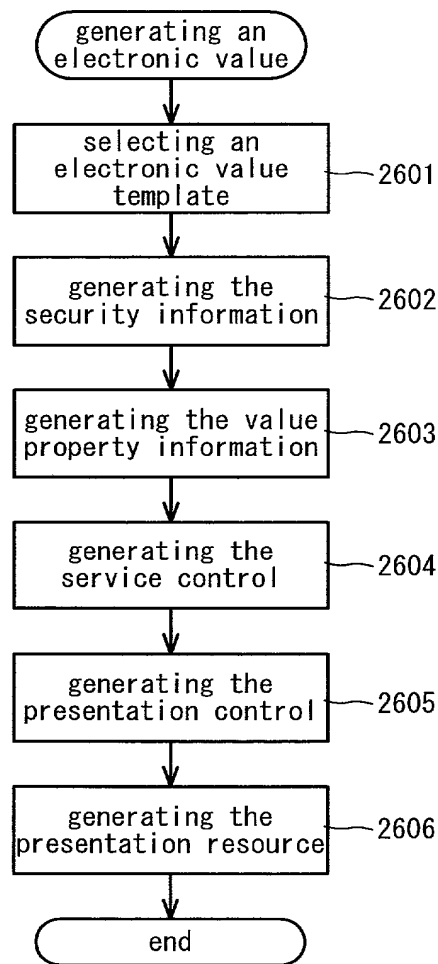
*Fig. 30*

(a)

```
<Description about="evIssuingRequest" ID="100000000000123">  
  <evType>ticket</evType>  
  <evCode>0000300000000201</evCode>  
  <evProp name="SEAT_NUM" value==" SS-A-28"/>  
  <evProp name=" SEAT_POS" value=" http://www.mts.com/ticket123/seat/SS-A-28"/>  
</Description>
```

(b)

```
<Description about="TerminalProfile" >  
  <TerminalType>MT0001</TerminalType>  
  <BrowserType>B000B20A</BrowserType>  
  <eWalletType>W000A10B</eWalletType>  
  <Screen>160x200x8</Screen>  
</Description>
```

*Fig. 31*

**Fig. 32**

The diagram illustrates an example XML document structure with various nested elements. The root element is <EVML version="0.1">. Inside it are several <SignedDescription> and <Description> elements, each containing specific metadata like about, eID, and signatures.

- <EVML version="0.1">**: Root element.
- <SignedDescription about="http://www.evalue.com/evalue/10000000000000000000000000000001">**: Contains:
  - <Signer rdf:resource="http://www.evalue.com"/>
  - <Signature>0123456789</Signature>
- <SignedDescription about="VariableProperty" eID="10000000000000000000000000000001">**: Contains:
  - <Signer rdf:resource="http://www.evalue.com/evalue/10000000000000000000000000000001"/>
  - <Signature>123456789A</Signature>
- <SignedDescription>**: Contains:
  - <Description about="ServiceCtrl" eID="10000000000000000000000000000001">
- <Description about="SecurityInf" eID="10000000000000000000000000000001">**
- <Description about="RepresentaionCtrl" eID="10000000000000000000000000000001" rdf:resource="http://www.evalue.com/evalue/ev\_0000300000000201/RpCtrl"/>**
- <Description about="RepresentaionRes" eID="10000000000000000000000000000001" rdf:resource="http://www.evalue.com/evalue/ev\_0000300000000201/RpRes"/>**
- <SignedTime>1999.09.07T12:15:07+0900</SignedTime>**
- <Signer rdf:resource="http://www.evalue.com"/>**
- <Signature>23456789AB</Signature>**
- </SignedDescription>**
- <SignedDescription about="http://www.evalue.com/evalue/ev\_0000300000000201/RpCtrl" eID="10000000000000000000000000000001">**: Contains:
  - <Signer rdf:resource="http://www.evalue.com"/>
  - <Signature>3456789ABC</Signature>
- <Description about="http://www.evalue.com/evalue/ev\_0000300000000201/RpRes" eID="10000000000000000000000000000001">**
- <Description about="http://www.evalue.com">**: Contains:
  - <EntityName>Mobile Ticket Service</EntityName>
  - <EntityID>00000000000000000000000000000001</EntityID>
  - <Email>ev\_issuer@evalue.com</Email>
  - <Telnum>81-3-5460-xxxx</Telnum>

Labels on the right side of the diagram point to specific elements:

- 801 presentation card
- 802 variable property
- 803 service control
- 804 security information
- 805 presentation control
- 806 presentation resource
- 1201 presentation control (entity)
- 1202 presentation resource (entity)
- 1200 description about service provider

Fig. 33

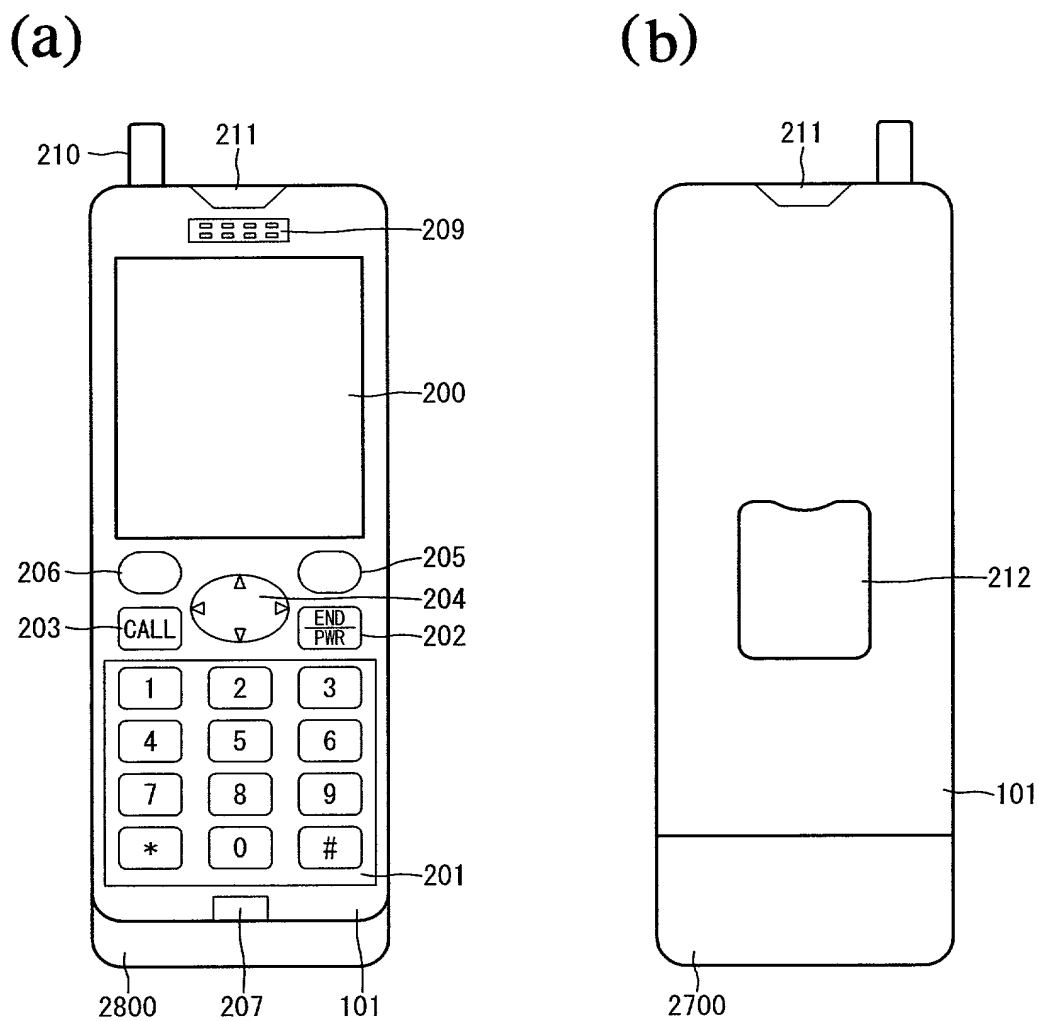


FIG. 34

Fig. 34

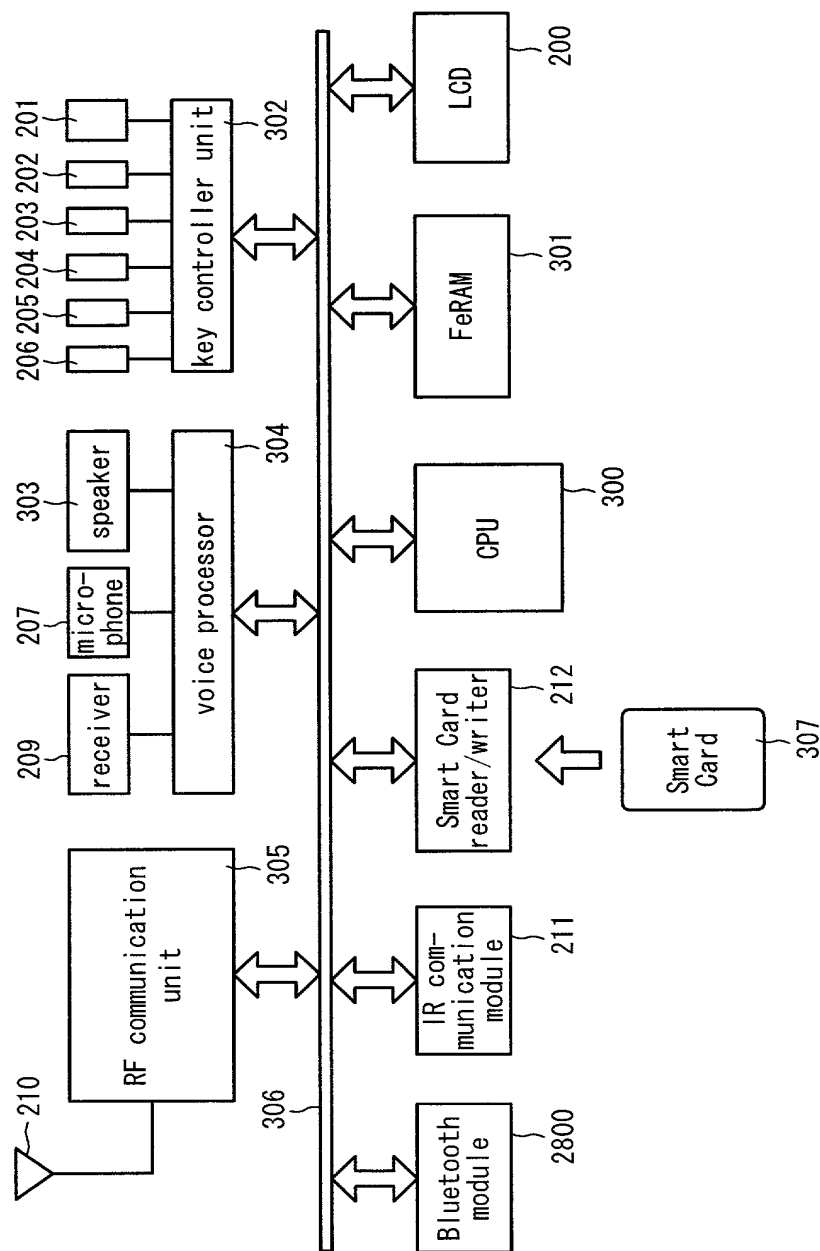
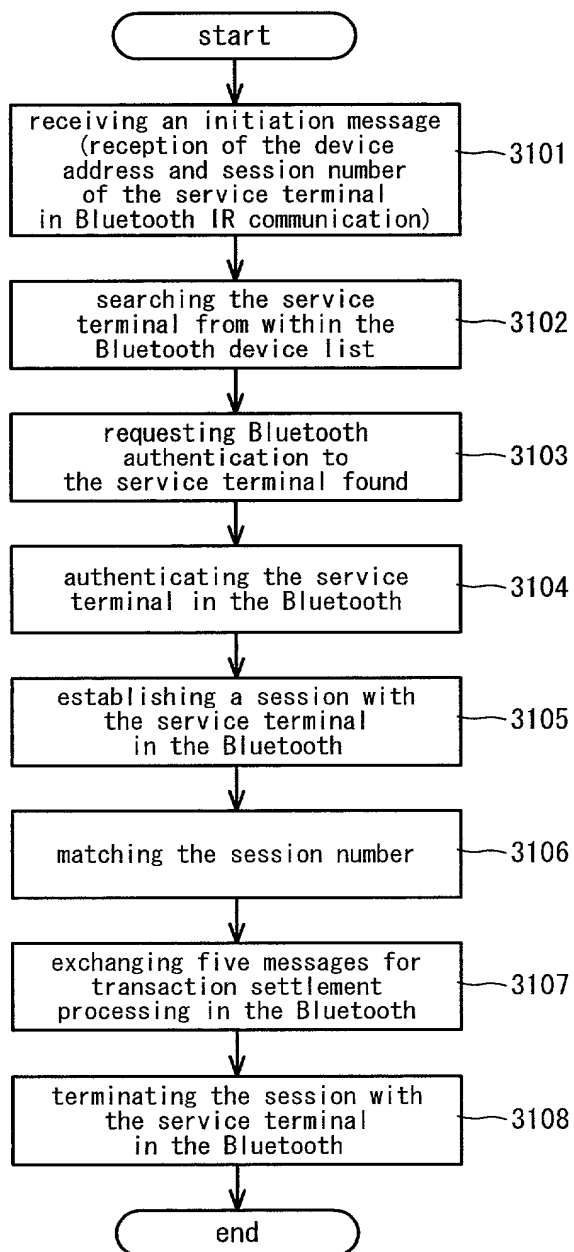




Fig. 36

(a) mobile user terminal



(b) service terminal

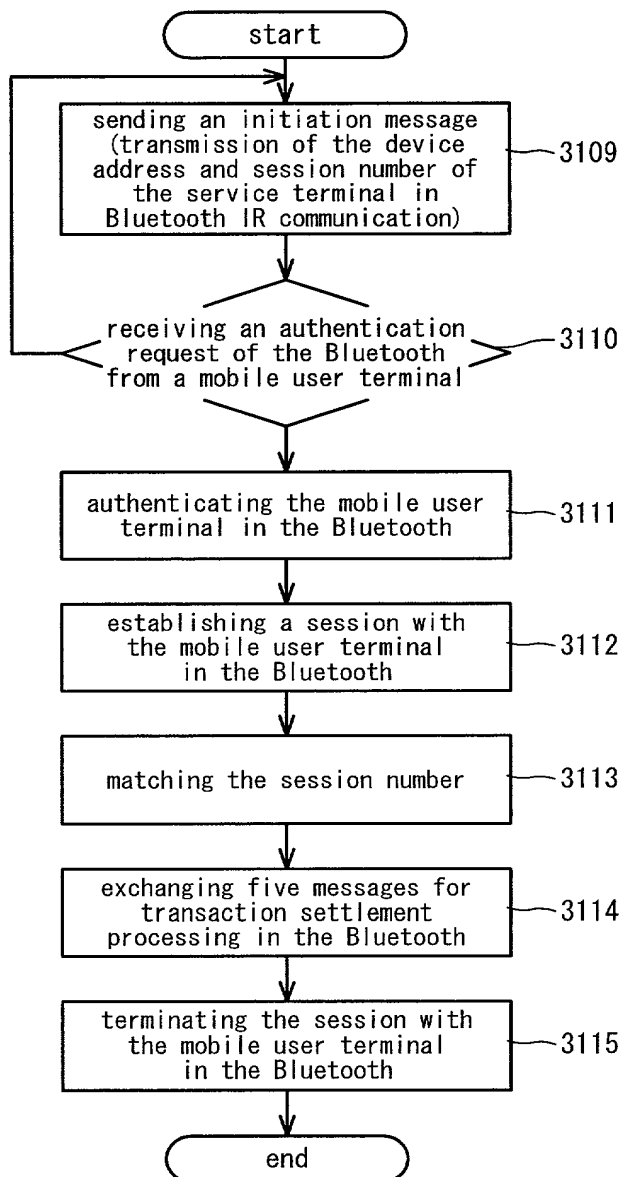
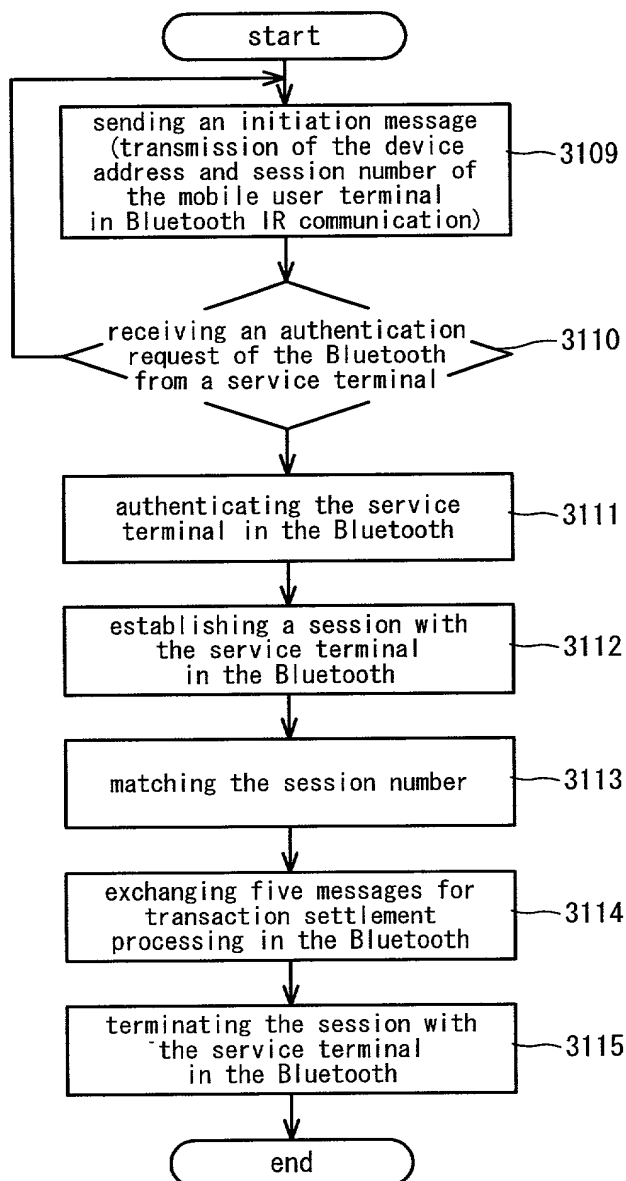


Fig. 37

(a) mobile user terminal



(b) service terminal

